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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/625,762	07/26/2000	Hideto Horikoshi	JA919990082US1	8025

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EXAMINER

HARRY, ANDREW T

ART UNIT

PAPER NUMBER

2684

DATE MAILED: 09/27/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/625,762

Applicant(s)

HORIKOSHI ET AL.

Examiner

Andrew T Harry

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 September 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7,9-11 and 14-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7,9-11 and 14-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

Cancelled Claims

1. Claim 13 has been cancelled by the Applicant and is therefore no longer considered pending in the Application.

Response to Arguments

Rejection under 35 U.S.C. § 103

Applicant's arguments filed September 12, 2002 have been fully considered but they are not persuasive. The Applicant's arguments dispute the Examiner's positions that *Connery et al.* (U.S. 6,311,176) teaches the steps described in claims 1 and 10 of "regenerating some or all of said bit sequence of wireless signal" and a step of "storing said some or all of said bit sequence of said wireless signal in a memory after exiting said power-saving mode".

Connery describes that his device includes the step of allowing "...the system to receive Wake On LAN packets across the medium, and in response to issue signals to the power management circuitry..." (see *Connery*, col. 5 lines 25-37) this indicates that *Connery's* device receives packets (a bit sequence) and regenerates that bit sequence and communicates with power management circuitry using the regenerated bit sequence. A network card receives the packets over the network and regenerates or retransmits those bits to the power management circuitry.

Connery also teaches that "...an information system department using the management station is able to end node management, such as software updates, back-ups of data, and other

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system wide services..." (see *Connery*, col. 5 lines 25-37) this clearly describes how *Connery's* device stores a part of the bit sequence of said signal in a memory after exiting power saving mode. Software updates can be downloaded to the device and the device obviously saves the software updates to some type of memory.

Rejection under 35 U.S.C § 112

The Applicant has overcome the rejection regarding claims 17-19 by clarifying the terminology used in the claims, however a rejection based on prior art follows in this office action.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-7, 9-11, and 14-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Connery et al. U.S. Patent 6,311,176** (Connery).

As pertaining to **claims 1 and 4**, Connery describes a method for receiving a signal by a computer adapted to operate in a power saving mode (see Connery abstract), said method comprising the steps of:

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detecting within a computer a wireless signal representing a bit sequence when said computer is operating in a power saving mode, wherein said signal is targeted for said computer (see Connery col. 6 line 53 – col. 7 line 16);

exiting said power saving mode automatically in response to said signal (see Connery col. 5 lines 26-32);

regenerating some or all of said bit sequence of said signal (see Connery col. 5 line 37 – 47, Connery discloses that the bit sequence is stored in boot code memory); and

storing said some or all of said bit sequence of said signal in memory after exiting the power-saving mode (see Connery col. 5 lines 26 – 36, Connery discloses that software updates can be imported onto the computer and for those to be effective they would obviously have to be stored on the device).

Connery does not specifically state that his network interface card (NIC) is used in a wireless networking environment. However, it would have been obvious to one of ordinary skill in the art at the time of the invention to understand that wired LANs and wireless LANs both use very similar protocols and signaling techniques to communicate data. So Connery's disclosure could easily have been used in a wireless networking environment in the same manner that it could have been used in a wired networking environment.

As pertaining to **claim 2**, Connery's method as modified above regarding claim 1 further includes the steps of:

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determining whether a wireless signal receiver device is installed and enabled by reading a plurality of status signals (see Connery col. 4 lines 28-42, Connery describes that a NIC is installed and typical handshaking procedures take place between the NIC and the device); and

exiting said power-saving mode only if said wireless signal receiver device is installed and enabled (see Connery col. 5 lines 26-32, obviously if the device is not installed and enabled the mode will not be effected).

As pertaining to **claim 3**, Connery's method as modified above regarding claim 1 further includes detecting a particular identification tag embedded in said bit sequence (see Connery col. 6 line 53 – col. 7 line 16).

As pertaining to **claim 5**, the bit sequence in Connery's method as modified above regarding claim 1 includes a request for said computer to exit said power saving mode (see Connery col. 5 lines 47-51).

As pertaining to **claim 6**, the bit sequence in Connery's method as modified above regarding claim 1 includes a request to continue execution of a program that is suspended while said computer is in said power-saving mode (see Connery col. 5 lines 25 - 55, Connery describes that the message can contain information regarding various software functions and other functions that the message commands the device to perform).

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As pertaining to **claim 7**, said computer in Connery's method as modified above regarding claim 1 comprises a receiving means for detecting said signal (see Connery col. 4 lines 28 – 42), and said computer further comprises a switch for maintaining power to said receiving means while operating in power-saving mode (see Connery col. 5 lines 10 – 25), and further comprising the step of:

setting said switch to maintain power to said receiving means prior to entering said power saving mode (see Connery col. 5 lines 10 – 25).

As pertaining to **claim 9**, Connery's method as modified above regarding claim 1 further includes the steps of:

processing information conveyed by said bit sequence (see Connery col. 5 lines 36-55);
and

returning to said power-saving mode (see Connery col. 5 lines 32-47, Connery discloses that the computer essentially performs whatever task is initiated by the received signal).

As pertaining to **claim 10**, Connery discloses a computer for receiving a signal while in a power-saving mode (see Connery col. 4 lines 28 – 42), said computer comprising:

a receiving means adapted to detect a signal representing a sequence of bits, wherein said receiving means is adapted to regenerate some or all of said bit sequence (see Connery, col. 5 lines 25-37), wherein said wireless signal is targeted for said computer (see Connery col. 6 line 53 – col. 7 line 16);

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a power-saving mode control means adapted to exit said power-saving mode in response to a detection of said signal when said computer is in said power-saving mode (see Connery col. 5 lines 26-32); and

a switch for enabling power to said receiving means when said computer is in said power-saving mode (see Connery col. 5 lines 10 – 25, the power management circuitry in the computer essentially acts as a switch).

a memory for storing said some or all of said regenerated bit sequence after said computer has exited said power-saving mode (see Connery, col. 5 lines 25-37)

Connery does not specifically state that his network interface card (NIC) is used in a wireless networking environment. However, it would have been obvious to one of ordinary skill in the art at the time of the invention to understand that wired LANs and wireless LANs both use very similar protocols and signaling techniques to communicate data. So Connery's disclosure could easily have been used in a wireless networking environment in the same manner that it could have been used in a wired networking environment.

As pertaining to **claim 11**, Connery as modified regarding claim 10 discloses a computer for receiving a signal while in a power-saving mode, said computer comprising:

one or more status indicators for indicating whether said receiving means is installed and enabled (see Connery col. 4 lines 28-42, Connery describes that a NIC is installed and typical handshaking procedures take place between the NIC and the device); and

wherein said power-saving mode control is adapted to exit said power-saving mode, only if said one or more status indicators show that said receiving means is installed and enabled (see

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Connery col. 5 lines 26-32, obviously if the device is not installed and enabled the mode will not be effected).

As pertaining to **claim 13**, Connery's computer device as modified above in claim 10, further includes:

a memory for storing bits;

wherein said receiving means is adapted to regenerate some or all of said bit sequence;

and

wherein said computer is adapted to store said regenerated some or all of said bit sequence in said memory when said computer has exited said power-saving mode (see Connery col. 5 lines 26 – 36, Connery discloses that software updates can be imported onto the computer and for those to be effective they would obviously have to be stored on the device).

As pertaining to **claim 14**, the receiving means in Connery's computer as modified above regarding claim 10 is an optional attachment to said computer (see Connery col. 4 lines 28 – 43, as is commonly known in the art NIC cards are easily interchangeable and removable in computer devices).

As pertaining to **claims 15 and 16**, Connery does not specifically disclose that said receiving means is formed in a device bay cover and said device bay cover is an optional attachment to said computer. However it would have been obvious to one of ordinary skill in that art at the time of the invention, based on device design, to implement a device bay cover to

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be used for the NIC on Connery's device. This would have allowed the user to easily and seamlessly plug in and remove the NIC from the user device. This would have been very useful if the user of the computer device used a docking station/device bay cover to host their laptop while working at a desk at work. The NIC, as well as the power connections and various other connections, would have been directly inserted into the docking station/device bay cover while the laptop could simply have been plugged into the bay cover.

As pertaining to **claim 17**, Connery describes a computer comprising:

a receiving means for receiving a signal representing a bit sequence (see Connery, col. 6 line 53-col. 7 line 16);

a power saving mode selection means for selectively entering and exiting a power-saving mode (see Connery, col. 5 lines 26-32); and

a detection means within said receiving means for detecting a signal targeted for said computer while said computer is in a power-saving mode (see Connery col. 6 line 53-col. 7 line 16); and

a control means within said power saving mode selection means for exiting said power-saving mode in response to said detected signal (see Connery, col. 5 lines 26-32).

Connery does not specifically state that his network interface card (NIC) is used in a wireless networking environment. However, it would have been obvious to one of ordinary skill in the art at the time of the invention to understand that wired LANs and wireless LANs both use very similar protocols and signaling techniques to communicate data. So Connery's disclosure could easily have been used in a wireless networking environment in the same manner that it could have been used in a wired networking environment.

As pertaining to **claim 18**, Connery's computer as modified above regarding claim 17 includes:

means for disabling at least one power source when said computer is in said power-saving mode, wherein said receiving means asserts a wake up signal to said control means to indicate said detected signal is targeted for said computer (see Connery, col. 6 line53-col.7 line 16 and col. 5 lines 26-32); and

a power management circuit to enable at least one power source, in response to said asserted wake-up signal (see Connery, col. 5 lines 10-25).

As pertaining to **claim 19**, Connery's computer as modified above regarding claim 17 teaches that said receiving means is an optional attachment to said computer (see Connery col. 4 lines 28 – 43, as is commonly known in the art NIC cards are easily interchangeable and removable in computer devices).

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

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however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew T Harry whose telephone number is 703-305-4749. The examiner can normally be reached on M-F 8:30 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel Hunter can be reached on 703-308-6732. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9314 for regular communications and 703-872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-4700.

ATH
September 26, 2002

THANH CONG LE
PRIMARY EXAMINER